

CLAIMS

1. A durable security device comprising:
 - (a) at least one support layer having a surface comprising a central longitudinal band or strip and opposing longitudinal borders;
 - 5 (b) at least one information-bearing layer disposed on the central band or strip of the support layer surface; and
 - (c) at least one protective layer disposed on the information-bearing layer(s) and on the opposing longitudinal borders of the support layer surface, wherein the protective layer(s) is adhered to at least the opposing longitudinal
 - 10 borders of the support layer surface.
2. The durable security device of claim 1, wherein the protective layer(s) has a thickness ranging from about 1 to about 12 microns.
3. The durable security device of claim 1, wherein the support layer(s) and the protective layer(s) are light-transmitting layers that are formed using one or more essentially
- 15 colorless polymers selected from the group of polyester, polypropylene, polyethylene, polyethylene terephthalate, and mixtures thereof.
4. The durable security device of claim 3, wherein the light-transmitting layers are formed using polyester.
5. The durable security device of claim 3, wherein the light-transmitting support
- 20 layer(s) is a colored, light-transmitting support layer(s).
6. The durable security device of claim 3, wherein the light-transmitting protective layer(s) is a colored, light-transmitting protective layer(s).
7. The durable security device of claim 3, wherein the light-transmitting support layer(s) is a luminescent, light-transmitting support layer(s).
- 25 8. The durable security device of claim 3, wherein the light-transmitting protective layer(s) is a luminescent, light-transmitting protective layer(s).
9. The durable security device of claim 1, wherein the information-bearing layer(s) is a continuous strip that is formed along the entire length of the support layer surface.
- 30 10. The durable security device of claim 1, wherein the information-bearing layer(s) is a discontinuous strip that is formed along the entire length of the support layer surface.

11. The durable security device of claims 9 or 10, wherein the strip contains visually perceivable information, machine-detectable information, and optionally, machine-readable information.

12. The durable security device of claims 9 or 10, wherein the strip is formed
5 using one or more materials selected from the group of aluminum, chromium, cobalt, copper, gold, iron, nickel, silver, alloys of two or more of the aforementioned materials, and alloys that produce an opaque layer upon sputtering, vacuum deposition, or plasma coating.

13. The durable security device of claim 12, wherein the strip is formed using aluminum.

10 14. The durable security device of claim 9, wherein the information-bearing layer(s) is a continuous metal or metallic strip having recesses in the shape of negative or reverse-image characters formed therein.

15 15. The durable security device of claim 10, wherein the information-bearing layer(s) is a discontinuous metal or metallic strip having at least one non-metal region extending across the entire width of the strip.

16. The durable security device of claim 15, wherein the discontinuous metal or metallic strip is provided with at least two non-metal regions, wherein a first non-metal region is located near one end of the strip, and wherein a second non-metal region is located near an opposing end of the strip.

20 17. The durable security device of claims 9 or 10, wherein the metal or metallic strip is provided with at least two non-metal regions, wherein a first non-metal region is located at one end of the strip, and wherein a second non-metal region is located at the opposing end of the strip, thereby forming a non-metal perimeter around the metal or metallic strip to which the protective layer(s) is adhered.

25 18. The durable security device of claim 1, wherein the information-bearing layer(s) is a diffractive, optically variable layer(s).

19. The durable security device of claim 1, wherein the information-bearing layer(s) is a multi-layer interference filter(s).

30 20. The durable security device of claim 1, wherein the information-bearing layer(s) comprises a first magnetic information-bearing layer and a second metal information-bearing layer.

21. The security device of claim 1, wherein a light-transmitting adhesive adheres the protective layer(s) to the opposing longitudinal borders of the support layer surface(s).

22. The security device of claim 21, wherein the light-transmitting adhesive is selected from the group of acrylic polymers and copolymers, modified acrylic polymers and copolymers and polyesters.

23. The security device of claim 22, wherein the light-transmitting adhesive is an acrylic polymer.

24. The security device of claim 15, which comprises two information-bearing layers, wherein the metal strips are adhered or laminated together in register such that the metal regions on one metal strip are lined up with the metal-free region(s) on the other metal strip.

25. The security device of claim 1, which further comprises at least one outer adhesive layer to facilitate incorporation of the device into or onto a security article.

26. A durable security device comprising:

(a) at least one support layer having a surface comprising a central longitudinal band or strip and opposing longitudinal borders;

(b) at least one information-bearing layer disposed on the central band or strip of the support layer surface; and

(c) at least one protective layer disposed on the information-bearing layer(s) and on the opposing longitudinal borders of the support layer surface,

wherein the protective layer(s) has a thickness ranging from about 1 to about 12 microns and is adhered to at least the opposing longitudinal borders of the support layer surface.

27. A durable security device comprising:

a first and a second support layer, wherein each support layer has a surface comprising a central longitudinal band or strip and opposing longitudinal borders, two information-bearing layers, wherein one information-bearing layer is disposed on the central band or strip of each support layer surface, wherein the second support layer is disposed on the information-bearing layer and on the opposing longitudinal borders of the first support layer surface, and wherein the second support layer is adhered to the opposing longitudinal borders of the first support layer surface, and

a protective layer disposed on the information-bearing layer and on the opposing longitudinal borders of the second support layer, wherein the protective layer is adhered to the opposing longitudinal borders of the second support layer surface.

28. A security article having at least one security device at least partially embedded therein and/or mounted thereon, wherein the security device comprises;

(a) at least one support layer having a surface comprising a central longitudinal band or strip and opposing longitudinal borders;

5 (b) at least one information-bearing layer disposed on the central band or strip of the support layer surface; and

(c) at least one protective layer disposed on the information-bearing layer(s) and on the opposing longitudinal borders of the support layer surface,

10 wherein the protective layer(s) is adhered to at least the opposing longitudinal borders of the support layer surface.

29. The security article of claim 28, wherein the protective layer(s) has a thickness ranging from about 1 to about 12 microns.

30. A security article having at least one security device at least partially embedded therein and/or mounted thereon, wherein the security device comprises;

15 (a) at least one support layer having a surface comprising a central longitudinal band or strip and opposing longitudinal borders;

(b) at least one information-bearing layer disposed on the central band or strip of the support layer surface; and

20 (c) at least one protective layer disposed on the information-bearing layer(s) and on the opposing longitudinal borders of the support layer surface,

wherein the protective layer(s) has a thickness ranging from about 1 to about 12 microns and is adhered to at least the opposing longitudinal borders of the support layer surface.

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